

04/03/01

1055 U.S. PTO

04-04-01

A

Please type a plus sign (+) inside this box → ☐

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. IN01154K

First Inventor CHEN, et al

Title MACROCYCLIA NS3-SERINE PROTEASE INHIBITORS OF
HEPATITIS C VIRUS COMPRISING N-CYCLIC P2 MOIETIES

Express Mail Label No. EL403238299US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 402]
(preferred arrangement set forth below)
- Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure

4. ☐ Drawing(s) (35 U.S.C. 113) [Total Sheets ☐

5. Oath or Declaration [Total Pages 14]

- a. ☒ Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
- b. ☐ (for continuation/divisional with Box 17 completed)

i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).

6. ☐ Application Data Sheet. See 37 CFR 1.76**ADDRESS TO:** Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Other:

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,
or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No. _____

Prior application information:

Examiner _____

Group / Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under
Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.
The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS☒ Customer Number or Bar Code Label

24265

or ☐ Correspondence address below

Name

PALAIYUR S. KALYANARAMAN Reg. No. 34634

Address

City

State

Zip Code

Country

Telephone

(908) 298-5068

Fax

(908) 298-5388

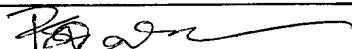
Name (Print/Type)

PALAIYUR S. KALYANARAMAN

Registration No. (Attorney/Agent)

34634

Signature



Date April 3, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on
the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC
20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application,
Washington, DC 20231.

Express Mail Label No.

EL403238299US

Date

April 3, 2001

PTO/SB/17 (09-00)

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL
for FY 2001**

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$) 998.00

Complete if Known

Application Number	To Be Assigned
Filing Date	April 3, 2001
First Named Inventor	Chen, et al
Examiner Name	To Be Assigned
Group Art Unit	To Be Assigned
Attorney Docket No.	IN01154K

METHOD OF PAYMENT

- 1.
- ☒
- The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit
Account
Number

19-0365

Deposit
Account
Name

Schering-Plough Corporation

- ☒
- Charge Any Additional Fee Required
-
- Under 37 CFR 1.16 and 1.17

- ☐
- Applicant claims small entity status.
-
- See 37 CFR 1.27

- 2.
- ☐
- Payment Enclosed:

- ☐
- Check
- ☐
- Credit card
- ☐
- Money
-
- Order
- ☐
- Other

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity Small Entity

Fee Fee Fee Fee
Code (\$) Code (\$) Fee Description

101	710	201	355	Utility filing fee	\$710.00
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

Fee Paid

SUBTOTAL (1) (\$) \$710.00

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
36	-20** = 16	18.00	\$288.00
3	-3** = -0-	-0-	-0-
Multiple Dependent			

Large Entity Small Entity

Fee Fee Fee Fee
Code (\$) Code (\$) Fee Description

103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$) 288.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**Large Entity Small Entity
Fee Fee Fee Fee
Code (\$) Code (\$) Fee Description

105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Fee Paid

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

Name (Print/Type)

PALAIYUR S. KALYANARAMAN

Registration No.
(Attorney/Agent)

34634

Complete (if applicable)

Telephone

(908) 298-5068

Signature

Date

APRIL 3, 2001

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date:

Typed or printed name

Signature

Date

PATENT APPLICATION COVER SHEET

**MACROCYCLIC NS3-SERINE PROTEASE INHIBITORS OF HEPATITIS C
VIRUS COMPRISING N-CYCLIC P2 MOIETIES**

INVENTORS:

KEVIN X.CHEN, a citizen of the United States, residing at 35 Royal Drive, #168, Piscataway, New Jersey 08854

ASHOK ARASAPPAN, a citizen of India, residing at 18 Larsen Court, Bridgewater, New Jersey 08807

SRIKANTH VENKATRAMAN, a citizen of India, residing at 6 Tulip Drive, #3H, Fords, New Jersey 08863

TEJAL PAREKH, a citizen of India, residing at 39 Pikeview Lane, Woodbridge, New Jersey 07095.

HAINING GU, a citizen of the Peoples Republic of China, residing at 558/70/303 Jiang Chuan Load, Minhang, Shanghai 200240, Peoples Republic of China.

F. GEORGE NJOROGI, a citizen of Kenya, residing at 2597 Juliat Place, Union, New Jersey 07083.

VIYYOOR MOOPIL GIRIJAVALLABHAN, a citizen of the United States, residing at 10 Maplewood Drive, Parsippany, New Jersey 07054.

ASHIT GANGULY, a citizen of the United States, residing at 96 Cooper Avenue, Upper Montclair, New Jersey 07043.

ANIL SAKSENA, a citizen of the United States, residing at 53 Beverly Road, Upper Montclair, New Jersey 07043.

DR. EDWIN JAO, a citizen of the United States, residing at 20 Crosswood Way, Warren, New Jersey 07059.

NANHUA HUGH YAO, a citizen of the United States, residing at 4 Timothy Court, Edison, New Jersey 08837.

ANDREW JOSEPH PRONGAY, a citizen of the United States, residing at 104 Willow Grove Road, Stewartville, New Jersey 08886.

VINCENT STEWART MADISON, a citizen of the United States, residing at 12 Ronarm Drive, Mountain Lakes, New Jersey 07046.

BANCHA VIBULBHAN, a citizen of Thailand, residing at 201
North 24th Street, Kenilworth, New Jersey 07033, U.S.A.

ASSIGNEE: SCHERING CORPORATION

EXPRESS MAIL LABEL NO. EL403238299US
Date of Deposit: April 3, 2001

Palaiyur S. Kalyanaraman
SCHERING-PLOUGH CORPORATION
Patent Department, K-6-1-1990
2000 Galloping Hill Road
Kenilworth, New Jersey 07033
Telephone: (908) 298-5068
Fax: (908) 298-5388

14702_1